

## **US PATENT DOCUMENTS**

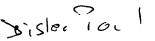
	DOCUMENT NUMBER Number-Kind Code (if known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
A1	4,638,505	01/20/1987	Polk, et al.		
A2	5,581,626	12/03/1996	Palmer		-
A3	6,031,920	02/29/2000	Wiener		

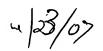
## **FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO
A4	EP 1 088 298 B1	11/12/2003	EPO		YES

## **OTHER ART REFERENCES**

<ul> <li>of the Audio Enqineering Society, June 1974, Vol. 22, No. 5, pp. 314-320.</li> <li>A6 ALLISON, Roy F., "The Sound Field in Home Listening Rooms.II" Audio Enqineering Societ 52<sup>nd</sup> Convention Oct. 31 – Nov. 3, 1975, AES preprint 1081 (L-2), 15 pages.</li> <li>A7 ASANO, Futoshi; SWANSON, David C., "Sound Equalization in Enclosures using Modal Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.</li> <li>A8 ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>A9 BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>A10 BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>A12 BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimal Program of Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-2</li></ul>		
<ul> <li>A6 ALLISON, Roy F., "The Sound Field in Home Listening Rooms.II" <u>Audio Engineering Societ</u> 52"d Convention Oct. 31 – Nov. 3, 1975, AES preprint 1081 (L-2), 15 pages.</li> <li>A7 ASANO, Futoshi; SWANSON, David C., "Sound Equalization in Enclosures using Modal Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.</li> <li>A8 ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, <u>asano@etl.go.jp</u>, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>A9 BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", <u>J. Audio. Eng. Soc.</u>, Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>A10 BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," <u>Journal of the Audio Engineering Society</u>, 109th Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," <u>Digital Audio</u>, pp. 226-238.</li> <li>A12 BHARTIKAR, Suniit, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," <u>Journal of the Audio Engineering Society</u>, Audio Engineering Society Convention Paper 5450, 111th Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), <u>Loudspeaker and Headphone Handbook</u>, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optic the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>A16 ELLIOTT, S.J., BHATIA, L.P., DEGHAN, F.S., FU, A.H., STEWART, M.S., WILSON, D.W., "Practical Implementation of Low-Frequency Equalization Using A</li></ul>	A5	ALLISON, Roy F., "The Influence of Room Boundaries on Loudspeaker Power Output", Journal
<ul> <li>52<sup>nd</sup> Convention Oct. 31 – Nov. 3, 1975, AES preprint 1081 (L-2), 15 pages.</li> <li>ASANO, Futoshi; SWANSON, David C., "Sound Equalization in Enclosures using Modal Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.</li> <li>ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunii, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimate Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., BHATIA, L.P., DEGHAN, F.S., FU, A.H.; STEWART, M.S.; WILSON, D.W., "Practical Imple</li></ul>		
<ul> <li>52<sup>nd</sup> Convention Oct. 31 – Nov. 3, 1975, AES preprint 1081 (L-2), 15 pages.</li> <li>ASANO, Futoshi; SWANSON, David C., "Sound Equalization in Enclosures using Modal Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.</li> <li>ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunii, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimate Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., BHATIA, L.P., DEGHAN, F.S., FU, A.H.; STEWART, M.S.; WILSON, D.W., "Practical Imple</li></ul>	A6	ALLISON, Roy F., "The Sound Field in Home Listening Rooms.II" Audio Engineering Society,
<ul> <li>Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.</li> <li>ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunii; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-80RWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optim the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J., BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practica</li></ul>		52 <sup>nd</sup> Convention Oct. 31 – Nov. 3, 1975, AES preprint 1081 (L-2), 15 pages.
<ul> <li>Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.</li> <li>ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>A9 BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>A10 BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>A12 BHARTIKAR, Sunii; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413 BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimate Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEW</li></ul>	A7	ASANO, Futoshi; SWANSON, David C., "Sound Equalization in Enclosures using Modal
Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.  A9 BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.  A10 BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109 <sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.  A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.  A12 BHARTIKAR, Sunil, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111 <sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-  A13 BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth & Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).  A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.  A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optim the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"		Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.
Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.  A9 BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.  A10 BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109 <sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.  A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.  A12 BHARTIKAR, Sunil, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111 <sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-  A13 BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth & Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).  A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.  A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optim the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A8	ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source
<ul> <li>Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.</li> <li>BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunil, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization,"
Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.  A9 BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.  A10 BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109 <sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.  A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.  A12 BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111 <sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-A13 BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth & Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).  A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a> , 1 page.  A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"		Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C.
<ul> <li>BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", <u>J. Audio. Eng. Soc.</u>, Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," <u>Journal of the Audio Engineering Society</u>, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunil, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," <u>Journal of the Audio Engineering Society</u>, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), <u>Loudspeaker and Headphone Handbook</u>, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a>, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.
<ul> <li>Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.</li> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimate Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>	A9	BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng.
<ul> <li>BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109<sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunil, KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a>, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		
Performance and Level Setting," Journal of the Audio Engineering Society, 109 <sup>th</sup> Convention Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.  A11 BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.  A12 BHARTIKAR, Sunii; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111 <sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-A13 BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth & Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).  A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.  A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A10	BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer
<ul> <li>Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.</li> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-80 BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Opting the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Performance and Level Setting," Journal of the Audio Engineering Society, 109th Convention,
<ul> <li>BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.</li> <li>BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimate Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.
<ul> <li>BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzz Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Opting the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>	A11	
Logic Approach," <u>Journal of the Audio Engineering Society</u> , Audio Engineering Society Convention Paper 5450, 111 <sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-  BORWICK, John (ed.), <u>Loudspeaker and Headphone Handbook</u> , Butterworth & Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).  A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a> , 1 page.  A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Option the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A12	BHARTIKAR, Sunil: KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzzy
<ul> <li>Convention Paper 5450, 111<sup>th</sup> Convention, Sept. 21-24, 2001, New York, New York, pp. 1-413</li> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Logic Approach." Journal of the Audio Engineering Society, Audio Engineering Society
<ul> <li>BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth &amp; Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.</li> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Opting the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Convention Paper 5450, 111th Convention, Sept. 21-24, 2001, New York, New York, pp. 1-10.
<ul> <li>(Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).</li> <li>A14 CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburge Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a>, 1 page.</li> <li>A15 D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>	A13	BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth & Co.
Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a> , 1 page.  D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"		
Landstrasse 215, D-24113 Kiel, Germany, <a href="http://www.cara.de/ENU/index.html">http://www.cara.de/ENU/index.html</a> , 1 page.  D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A14	CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburger
<ul> <li>D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optime the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.</li> <li>ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.</li> <li>ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"</li> </ul>		Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.
the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A15	D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimize
Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.  A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digit Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"		the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room
A16 ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digition Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"		Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.
Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.  A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.;  "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A16	ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital
A17 ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.; "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"		Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.
"Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"	A17	ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.;
	l	"Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters,"
Journal of the Audio Engineering Society, December 1994, Vol. 42, No. 12, pp. 988-998.		Journal of the Audio Engineering Society, December 1994, Vol. 42, No. 12, pp. 988-998.
A18 FLIKKEMA, Paul G., "An Algebraic Theory of 3D Sound Synthesis with Loudspeakers," AE	A18	FLIKKEMA, Paul G., "An Algebraic Theory of 3D Sound Synthesis with Loudspeakers," AES
22 <sup>nd</sup> International Conference on Virtual, Synthetic and Entertainment Audio, pp. 1-4.		22 <sup>nd</sup> International Conference on Virtual, Synthetic and Entertainment Audio, pp. 1-4.





sisler Tou 1

A19	GRIESINGER, David, "Multichannel Sound Systems and Their Interaction with the Room,"  AES 15 <sup>th</sup> International Conference, pp. 159-173.
A20	GROH, A.R., "High Fidelity Sound System Equalization by Analysis of Standing Waves",
720	Journal of the Audio Engineering Society, December, 1974, Vol. 22, No. 10, pp. 795-799.
A21	HORBACH, DrIng. Ulrich; CORTEEL, Etienne, "Array Loudspeaker System for Virtual Sound
721	Synthesis," Patent Application, 10 pages.
A22	HORBACH, Ulrich, KARAMUSTAFAOGLU, Attila, "Numerical Simulation of Wave Fields
722	Created by Loudspeaker Arrays," Journal of the Audio Engineering Society, AES preprint 5021
	(H-2), 107 <sup>th</sup> Convention, Sept. 24-27, 1999, New York, 17 pages.
A22	HORST, R.; Thoai, N.; PARDALOS, Panos M., THOAI Nguyen V., "Introduction to Global
A23	MORST, R., Modi, N., PARDALOS, Parios IVI., Modifygyer V., Infloadation to Clobal
100	Optimization", 2 <sup>nd</sup> Edition, 2000, Kluwer Academic Publishers.  JACOBSEN, Oluf, "Some Aspects of the Self and Mutual Radiation Impedance Concepts with
A24	JACOBSEN, Old, Some Aspects of the Sell and Multial Radiation impedance Concepts with
	Respect to Loudspeakers", <u>Journal of the Audio Engineering Society</u> , March 1976, Vol. 24,
	No. 2, pp. 82-92.
A25	KIRKEBY Ole; NELSON, PHILIP A.; HAMADA, Hareo; ORDUNA-BUSTAMANTE, Felipe, "Fast
<b> </b>	Deconvolution of Multi-Channel Systems using Regularization," 1998 IEEE, 1063-6676/98, pp.
	189-195.
A26	KLEINER, Mendel; LAHTI, Hans, "Computer Prediction of Low Frequency SPL Variations in
	Rooms as a function of Loudspeaker Placement," Journal of the Audio Engineering Society,
	AES preprint 3577 (G2-7), 94 <sup>th</sup> Convention, March 16-19, 1993, Berlin, 16 pages.
A27	KORST-FAGUNDES, Bruno, "Acoustical Equalization at Multiple Listening Positions", Selected
	Portions, UMI Dissertation Services, Degree Date: 1996, 26 pages.
A28	MORSE, P.M., Vibration and Sound, 2 <sup>nd</sup> . Edition, McGraw Hill, NY, 1948, 25 pages.
A29	MORSE, P.M., and INGARD, K.U., Theoretical Acoustics, 1968, p. 576-599.
A30	MOURJOPOULOS, John H., "Digital Equalisation of Room Acoustics," Journal of the Audio
	Engineering Society, 92 <sup>nd</sup> Convention, AES Preprint 3288, March 24-27, Vienna, 1992, 32
	pages.
A31	MUNSHI, Anees Saeed, "Multi-Loudspeaker Multi-Point Room Equalization," Thesis (M.A.Sc.),
' ' '	University of Toronto, 1990, ISBN 0-315-56734-1, 103 pages.
A32	NEELY, Stephen T., Allen Jont B., "Invertibility of a room impulse response," J. Acoust. Soc.
	Am 66 (1), July 1979, 5 pages.
A33	OLIVE, Sean E.; SCHUCK, Peter L.; SALLY, Sharon L.; BONNEVILLE, Mark E.; "The Effects
' ''	of Loudspeaker Placement on Listener's Preference Ratings," J. Audio Eng. Soc., September
	1994, Vol. 42, No. 9, pp. 651-669.
A34	OPPENHEIM, Alan V., SCHAFER, Ronald W., STOCKHAM, Thomas G., Jr., "Nonlinear
	Filtering of Multiplied and Convolved Signals", IEEE Transactions on Audio and
	Flectroacoustics Sept. 1968, Vol. AU-16, No. 3, pp. 437-466.
A35	OPPENHEIM, Alan V.; SCHAFER, Ronald W.; BUCK, John R., Discrete Signal Processing, 2 <sup>nd</sup>
	Edition, 1999, Prentice Hall, 4 pages.
A36	PEDERSEN, Jan A.; HERMANSEN, Kjeld; and RUBAK, Per, "The Distribution of the Low
1	Frequency Sound Field and its Relation to Room Equalization", Journal of the Audio
	Engineering Society, 96th Convention, AES preprint 3852 (P12.5), February 26-March 1, 1994,
	Amsterdam, 33 pages.
A37	SANTILLIN, Arturo Orozco, "Experimental Low-Frequency Sound Equalization in an Extended
1	Region of An Enclosure Using Adaptive Filters," Journal of the Audio Engineering Society, AES
1	preprint 4755 (P8-4), 104 <sup>th</sup> Convention, May 16-19, 1998, Amsterdam, 9 pages.
A38	WALKER, R., "Low-Frequency Room Responses: Part 2 – Calculation Methods and
1	Experimental Results," BBC Research Dept. Report BBD RD 1992/9, 1992, 21 pages.
A39	WATERHOUSE, Richard V. "Output of a Sound Source in a Reverberation Chamber and
1 117	Other Reflecting Environments," The Journal of the Acoustical Society of America, Vol. 30, No.
1 /	1, pp. 4-13.
Á40	WELTI, Todd, "How Many Subwoofers are Enough" <u>Journal of the Audio Engineering Society.</u>
1/7	Audio Engineering Society Convention Paper, 112 <sup>th</sup> Convention May 10-13, 2002, Munich
Ĭ.	Germany, pp. 1-15.
	1 marrier, 1, 1m.

Sisler ?av !

-M/23/02



A41	WELTI, Todd, "Subwoofers: Optimum Number and Locations," 30 pages.
A42	ZACHAROV, Nick; BECH, Soren; MEARES, David, "The Use of Subwoofers in the Context of
	Surround Sound Program Reproduction," J. Audio Eng. Soc., April 1998, Vol. 46, No. 4, pp.
	276-287.

In accordance with 37 C.F.R. § 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed prior to the receipt of the first Official Action reflecting an examination on the merits and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Brinks Hofer Gilson & Lione Deposit Account No. 23-1925. A duplicate copy of this document is enclosed.

Applicant(s) respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

Amir N. Penn

Registration No. 40,767 Attorney for Applicant(s)

BRINKS HOFER GILSON & LIONE P.O. Box 10395 Chicago, IL 60610 (312) 321-4200